ArcelorMittal Burns Harbor, LLC.
Flat Carbon Steel

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
Mr. James Filippini
Mr. Douglas Lamb
Water Division Compliance Branch
United States Environmental Protection Agency, Region V
77 West Jackson Boulevard (WC-15J)
Chicago, Illinois 60604-3590

September 26, 2016
PJ/DW

Subject: Annual Dock Wall Observation and Repair
Consent Decree – Case No. 2:96-CV-96-RL-1
ArcelorMittal Burns Harbor LLC

Dear Messrs. Filippini and Lamb:

Attachment 1 is the summary report of the annual dock wall inspection for 2016. This document summarizes the results of the annual dock wall observation that was conducted on August 23, 30, and September 6, 2016, by Weaver Consultants Group, contractor to ArcelorMittal Burns Harbor, as required by Paragraph 21 of the subject decree.

During the annual observations, twenty five (25) locations were found along the dock wall with discernible discharges of flowing water. Notification regarding these findings was made via e-mail to Ms. Susan Prout (EPA Region V, Office of Regional Counsel) by T. E. Kirk on August 23, and September 7, 2016. Originally, 26 discharges were reported. However, the discharge recorded as #5 did not have a discernable discharge that could be sampled. As a result, no information is available for #5. It has been marked and will be repaired with along with the discernable discharges.

All but one of the locations were found in the coffer dam section of the dock wall. The height above the Lake Michigan level and the estimated flow from each location are noted in Attachment 1.

Samples were obtained from all locations and submitted to a contract analytical laboratory for nitrogen-ammonia analysis. The reports of these analyses are provided in Attachment 2. The results are also summarized in Attachment 1 and used to estimate the amount of ammonia discharged, on a daily basis, from these locations. Digital photographs of each of the locations were also obtained and are provided in Attachment 3.

ArcelorMittal Burns Harbor, LLC.
Environmental Mgmt. Dept.
250 W. U.S. Highway 12
Burns Harbor, IN 46304
USA

T +1 219 787 2712
F +1 219 787 4973
www.arcelormittal.com

ArcelorMittal

Repairs have been contracted and are expected to begin by mid-October. Due to heavy boat traffic, an estimated date of completion of repairs is not yet available. Photographs of the locations after repair/sealing will be provided in a separate report.

No one particular cause for the discharges was identified. Because almost all of the discharges were observed along the coffer dam section of the harbor wall and the nitrogen-ammonia concentrations of most of the discharges are well below the concentration of the groundwater being captured by the dewatering well system (i.e., average of 6.7 mg/L for the previous 12 months), it is surmised that these concrete cellular revetments were discharging accumulated stormwater runoff that had inadvertently seeped through the caps of these structures. Therefore, the source of the water is not groundwater that is adequately being controlled by the dewatering well system. Based on the ammonia concentrations and estimated flow rates summarized in Attachment 1, approximately sixty seven one hundredths of a pound per day (0.67 lbs/day) of ammonia is being discharged to the harbor from all 8 locations. Notwithstanding, Burns Harbor has responded as quickly as possible to the identification of the locations in order to timely minimize and/or eliminate any potential impact.

If there are any questions concerning this matter, please contact T. E. Kirk or me at (219) 787-2712.

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein and that I have made a diligent inquiry of those individuals immediately responsible for obtaining the information and that to the best of my knowledge and belief, the information submitted herewith is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Very truly yours,

R. A. Maciel, Manager
Environmental Management Department

Attachments

ArcelorMittal Burns Harbor, LLC.
Environmental Mgmt. Dept.
250 W. U.S. Highway 12
Burns Harbor, IN 46304
USA

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ArcelorMittal Burns Harbor, LLC
Annual Dock Wall Observation
Consent Decree – Case No. 2:96-CV-96-RL-1

Attachment 1 – Summary Report of the 2016 Annual Dock Wall Inspection

ArcelorMittal Burns Harbor, LLC
August 23, 30, and September 6, 2016 Dock Wall Inspection
Performed by: Weaver Boos Consultants

ID Number	Height Above Water (feet)	Estimated Flow Rate (Liters/minute)	Estimated Flow (Gal/Min)	Ammonia Concentration* (mg/L)	Ammonia Dischage (Pounds/day)	Date of Repair
16-1	5	0.14	0.04	0.66	<0.001	TBD
16-2	3	0.1	0.03	5.4	0.002	TBD
16-3	5	0.08	0.02	2.4	0.001	TBD
16-4	5	0.8	0.02	5.2	0.013	TBD
16-6	2	1.5	0.40	2.7	0.013	TBD
16-7	5	8	2.11	2.4	0.061	TBD
16-8	0.5	11.36	3.00	2.8	0.101	TBD
16-9	5	2.5	0.66	2.5	0.020	TBD
16-10	5	13	3.43	2.2	0.091	TBD
16-11	3.5	2.5	0.66	1	1.008	TBD
16-12	3.5	39	10.30	1.1	0.136	TBD
16-13	3.5	21.5	5.68	1.2	0.082	TBD
16-14	4.5	3.7	0.98	1.3	0.015	TBD
16-15	5	15.14	4.00	0.41	0.020	TBD
16-16	5	0.12	0.03	1.7	0.001	TBD
16-17	4.5	2.28	0.60	1.2	0.009	TBD
16-18	2.5	0.6	0.16	0.25	<0.001	TBD
16-19	2.5	0.28	0.07	0.6	0.001	TBD
16-20	2.5	0.88	0.23	0.45	0.001	TBD
16-21	3.5	0.88	0.23	0.53	0.001	TBD
16-22	5	0.12	0.03	0.33	<0.001	TBD
16-23	3.5	2	0.53	2.7	0.017	TBD
16-24	5	0.24	0.06	1.9	0.001	TBD
16-25	4	3.79	1.00	5.0	0.060	TBD
16-26	4	0.88	0.23	4.8	0.013	TBD

Total Potential Ammonia Discharge (pounds per day) from all locations: **0.67**

* Results reported are the larger of the sample and duplicate analysis.

ArcelorMittal Burns Harbor, LLC
Annual Dock Wall Observation
Consent Decree – Case No. 2:96-CV-96-RL-1

Attachment 2 – Nitrogen Ammonia Analytical Results

MICROBAC®

August 30, 2016

Arcelor Mittal USA, Inc.
250 W US Highway 12
Burns Harbor, IN 46304-9745

Work Order No.: 16H1697

Re: Dock Wall Inspection

Dear Teri Kirk:

Microbac Laboratories, Inc. - Chicagoland Division received 8 sample(s) on 8/24/2016 9:35:00AM for the analyses presented in the following report as Work Order 16H1697.

The enclosed results were obtained from and are applicable to the sample(s) as received at the laboratory. All sample results are reported on an "as received" basis unless otherwise noted.

All data included in this report have been reviewed and meet the applicable project specific and certification specific requirements, unless otherwise noted. A qualifications page is included in this report and lists the programs under which Microbac maintains certification.

This report has been paginated in its entirety and shall not be reproduced except in full, without the written approval of Microbac Laboratories.

We appreciate the opportunity to service your analytical needs. If you have any questions, please contact your project manager. For any feedback, please contact Robert Crookston, Managing Director, at robert.crookston@microbac.com.

Sincerely,
Microbac Laboratories, Inc.

Carey Gadzala
Project Manager

MICROBAC®

WORK ORDER SAMPLE SUMMARY

Date: *Tuesday, August 30, 2016*

Client: Arcelor Mittal USA, Inc.
Project: Dock Wall Inspection
Lab Order: 16H1697

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
16H1697-01	16-1		08/23/2016 09:02	8/24/2016 9:35:00AM
16H1697-02	16-2		08/23/2016 09:50	8/24/2016 9:35:00AM
16H1697-03	16-3		08/23/2016 12:26	8/24/2016 9:35:00AM
16H1697-04	16-4		08/23/2016 13:35	8/24/2016 9:35:00AM
16H1697-05	16-1D		08/23/2016 09:02	8/24/2016 9:35:00AM
16H1697-06	16-2D		08/23/2016 09:50	8/24/2016 9:35:00AM
16H1697-07	16-3D		08/23/2016 12:26	8/24/2016 9:35:00AM
16H1697-08	16-4D		08/23/2016 13:35	8/24/2016 9:35:00AM

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Analytical Results

Date: *Tuesday, August 30, 2016*

Client:	Arcelor Mittal USA, Inc.		
Client Project:	Dock Wall Inspection	**Work Order/ID:**	16H1697-01
Client Sample ID:	16-1	**Sampled:**	08/23/2016 9:02
Sample Description:		**Received:**	08/24/2016 9:35
Matrix:	Aqueous		

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
			Method: **EPA 350.1 Rev 2.0**				Analyst: **GRIEFF**	
Nitrogen, Ammonia as N			Prep Method: **Aqueous Ammonia Distillatio**			Prep Date/Time: **08/29/2016 08:25**		
Nitrogen, Ammonia (As N)	di	A	*0.64*	0.10		mg/L	1	08/29/2016 11:07

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Analytical Results

Date: *Tuesday, August 30, 2016*

Client:	Arcelor Mittal USA, Inc.		
Client Project:	Dock Wall Inspection	**Work Order/ID:**	16H1697-02
Client Sample ID:	16-2	**Sampled:**	08/23/2016 9:50
Sample Description:		**Received:**	08/24/2016 9:35
Matrix:	Aqueous		

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
			Method: **EPA 350.1 Rev 2.0**				Analyst: **GRIEFF**	
Nitrogen, Ammonia as N			Prep Method: **Aqueous Ammonia Distillatio**			Prep Date/Time: **08/29/2016 08:25**		
Nitrogen, Ammonia (As N)	di	A	*5.4*	0.10		mg/L	1	08/29/2016 11:12

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Analytical Results

Date: *Tuesday, August 30, 2016*

Client:	Arcelor Mittal USA, Inc.		
Client Project:	Dock Wall Inspection	**Work Order/ID:**	16H1697-03
Client Sample ID:	16-3	**Sampled:**	08/23/2016 12:26
Sample Description:		**Received:**	08/24/2016 9:35
Matrix:	Aqueous		

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
			Method: **EPA 350.1 Rev 2.0**				Analyst: **GRIEFF**	
Nitrogen, Ammonia as N			Prep Method: **Aqueous Ammonia Distillatio**				Prep Date/Time: **08/29/2016 08:25**	
Nitrogen, Ammonia (As N)	di	A	*2.4*	0.10		mg/L	1	08/29/2016 11:14

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Analytical Results

Date: *Tuesday, August 30, 2016*

Client: Arcelor Mittal USA, Inc.
Client Project: Dock Wall Inspection
Client Sample ID: 16-4
Sample Description:
Matrix: Aqueous

Work Order/ID: 16H1697-04
Sampled: 08/23/2016 13:35
Received: 08/24/2016 9:35

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
			Method: **EPA 350.1 Rev 2.0**				Analyst: **GRIEFF**	
Nitrogen, Ammonia as N			Prep Method: **Aqueous Ammonia Distillatio**			Prep Date/Time: **08/29/2016 08:25**		
Nitrogen, Ammonia (As N)	di	A	*4.8*	0.10		mg/L	1	08/29/2016 11:16

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Analytical Results

Date: *Tuesday, August 30, 2016*

Client:	Arcelor Mittal USA, Inc.		
Client Project:	Dock Wall Inspection	**Work Order/ID:**	16H1697-05
Client Sample ID:	16-1D	**Sampled:**	08/23/2016 9:02
Sample Description:		**Received:**	08/24/2016 9:35
Matrix:	Aqueous		

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
			Method: **EPA 350.1 Rev 2.0**				Analyst: **GRIEFF**	
Nitrogen, Ammonia as N			Prep Method: **Aqueous Ammonia Distillatio**			Prep Date/Time: **08/29/2016 08:25**		
Nitrogen, Ammonia (As N)	dl	A	*0.66*	0.10		mg/L	1	08/29/2016 11:18

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Analytical Results

Date: *Tuesday, August 30, 2016*

Client: Arcelor Mittal USA, Inc.
Client Project: Dock Wall Inspection
Client Sample ID: 16-2D
Sample Description:
Matrix: Aqueous

Work Order/ID: 16H1697-06
Sampled: 08/23/2016 9:50
Received: 08/24/2016 9:35

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
			Method: **EPA 350.1 Rev 2.0**				Analyst: **GRIEFF**	
Nitrogen, Ammonia as N			Prep Method: **Aqueous Ammonia Distillatio**				Prep Date/Time: **08/29/2016 08:25**	
Nitrogen, Ammonia (As N)	di	A	*5.1*	0.10		mg/L	1	08/29/2016 11:24

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Analytical Results

Date: *Tuesday, August 30, 2016*

Client:	Arcelor Mittal USA, Inc.		
Client Project:	Dock Wall Inspection	**Work Order/ID:**	16H1697-07
Client Sample ID:	16-3D	**Sampled:**	08/23/2016 12:26
Sample Description:		**Received:**	08/24/2016 9:35
Matrix:	Aqueous		

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
			Method: **EPA 350.1 Rev 2.0**				Analyst: **GRIEFF**	
Nitrogen, Ammonia as N			Prep Method: **Aqueous Ammonia Distillatio**				Prep Date/Time: **08/29/2016 08:25**	
Nitrogen, Ammonia (As N)	di	A	2.4	0.10		mg/L	1	08/29/2016 11:26

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Analytical Results

Date: *Tuesday, August 30, 2016*

Client: Arcelor Mittal USA, Inc.
Client Project: Dock Wall Inspection
Client Sample ID: 16-4D
Sample Description:
Matrix: Aqueous

Work Order/ID: 16H1697-08
Sampled: 08/23/2016 13:35
Received: 08/24/2016 9:35

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
			Method: **EPA 350.1 Rev 2.0**					Analyst: **GRIEFF**
Nitrogen, Ammonia as N			Prep Method: **Aqueous Ammonia Distillatio**					Prep Date/Time: **08/29/2016 08:25**
Nitrogen, Ammonia (As N)	dl	A	*5.2*	0.10		mg/L	1	08/29/2016 11:28

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FLAGS, FOOTNOTES AND ABBREVIATIONS (as needed)

B = Detected in the associated method Blank at a concentration above the routine RL
b- = Detected in the associated method Blank at a concentration greater than 2.2 times the MDL
b* = Detected in the associated method Blank at a concentration greater than half the RL
CFU = Colony forming units
D = Dilution performed on sample
DF = Dilution Factor
g = Gram
E = Value above quantitation range
H = Analyte was prepared and/or analyzed outside of the analytical method holding time
I = Matrix Interference
J = Analyte concentration detected between RL and MDL (Metals / Organics)
LOD = Limit of Detection
LOQ = Limit of Quantitation
m3 = Meters cubed
MDL = Method Detection Limit
mg/Kg = Milligrams per Kilogram (ppm)
mg/L = Milligrams per Liter (ppm)
NA = Not Analyzed
ND = Not Detected at the Reporting Limit (or the Method Detection Limit, if used)
NR = Not Recovered
R = RPD outside accepted recovery limits
RL = Reporting Limit
S = Spike recovery outside recovery limits
Surr = Surrogate
U = Undetected
> = Greater than
< = Less than
% = Percent
* = Result exceeds project specific limits

ANALYTE TYPES: (AT)

A,B = Target Analyte
I = Internal Standard
M = Summation Analyte
S = Surrogate
T = Tentatively Identified Compound (TIC, concentration estimated)

QC SAMPLE IDENTIFICATIONS

BLK = Method Blank
DUP = Method Duplicate
BS = Method Blank Spike
MS = Matrix Spike
ICB = Initial Calibration Blank
CCB = Continuing Calibration Blank
CRL = Client Required Reporting Limit
PDS = Post Digestion Spike
QCS = Quality Control Standard
ICSA = Interference Check Standard "A"
ICSAB = Interference Check Standard "AB"
BSD = Method Blank Spike Duplicate
MSD = Matrix Spike Duplicate
ICV = Initial Calibration Verification
CCV = Continuing Calibration Verification
OPR = Ongoing Precision and Recovery Standard
SD = Serial Dilution

CERTIFICATIONS (Certs)

Below is a list of certifications maintained by the Microbac Merrillville Laboratory. All data included in this report has been reviewed for and meets all project specific and quality control requirements of the applicable accreditation, unless otherwise noted. Complete lists of individual analytes pursuant to each certification below are available upon request.

[d] Illinois EPA drinking water, wastewater and solid waste analysis (#200064)

[i] Kansas Dept Health & Env. NELAP (#E-10397)

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COOLER INSPECTION

Date: Tuesday, August 30, 2016

Client Name: Arcelor Mittal USA, Inc.

Date/Time Received: 08/24/2016 09:35

Work Order Number: 16H1697

Received by: Nicole Rainwater

Checklist completed by: 8/24/2016 10:16:00AM | Nicole Rainwater

Reviewed by: 8/24/2016 | KAZ

Carrier Name: Microbac

Cooler ID: Default Cooler

Container/Temp Blank Temperature: 3.5° C

After-Hour Arrival?	Yes	☐	No	☑		
Shipping container/cooler in good condition?	Yes	☑	No	☐	Not Present	☐
Custody seals intact on shipping container/cooler?	Yes	☐	No	☐	Not Present	☑
Custody seals intact on sample containers?	Yes	☐	No	☐	Not Present	☑
COC present?	Yes	☑	No	☐		
COC included sufficient client identification?	Yes	☑	No	☐		
COC included sufficient sample collector information?	Yes	☑	No	☐		
COC included a sample description?	Yes	☑	No	☐		
COC agrees with sample labels?	Yes	☑	No	☐		
COC identified the appropriate matrix?	Yes	☑	No	☐		
COC included date of collection?	Yes	☑	No	☐		
COC included time of collection?	Yes	☑	No	☐		
COC identified the appropriate number of containers?	Yes	☑	No	☐		
Samples in proper container/bottle?	Yes	☑	No	☐		
Sample containers intact?	Yes	☑	No	☐		
Sufficient sample volume for indicated test?	Yes	☑	No	☐		
All samples received within holding time?	Yes	☑	No	☐		
If the samples are preserved, are the preservatives identified?	Yes	☑	No	☐		

If No, adjusted by? _____

COC included the requested analyses?	Yes	☑	No	☐		
COC signed when relinquished and received?	Yes	☑	No	☐		
Samples received on ice?	Yes	☑	No	☐		
Samples properly preserved?	Yes	☑	No	☐		
Voa vials for aqueous samples have zero headspace?	Yes	☐	No	☐	No VOA vials submitted	☑

Cooler Comments:

ANY "NO" EVALUATION (excluding After-Hour Receipt) REQUIRES CLIENT NOTIFICATION.

Sample ID	Client Sample ID	Comments
16H1697-01	16-1	
16H1697-02	16-2	
16H1697-03	16-3	
16H1697-04	16-4	
16H1697-05	16-1D	
16H1697-06	16-2D	
16H1697-07	16-3D	
16H1697-08	16-4D	

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Samples Submitted to: [] 250 West 84th Drive, Merrillville, IN 46410, Tel: 219-769-8378, Fax: 219-769-1664 [] 5713 West 85th Street, Indianapolis, IN 46278, Tel: 317-872-1375, Fax: 317-872-1379

Chain of Custody Record

Number 136490

Instructions on back

Client Name ArcelorMittal	Project Dock Wall Inspection	**Turnaround Time**	**Report Type**
Address 250 West US Hwy 12	Location	[X] Routine (5 to 7 business days)	[X] Results Only
City, State, Zip Burns Harbor, IN	PO #	[] RUSH* (notify lab)	[] Level III [] Level II
Contact Teri Kirk	Compliance Monitoring? [] Yes [] No	_____ (needed by)	[] Level IV [] Level I
Telephone #	(1)Agency/Program		[] EDD

Sampled by (PRINT) Patty Kostro Sampler Signature Patty L Kostro Sampler Phone # _____

Send Report via [] Mail [] Telephone [] Fax (fax #) _____ [X] e-mail (address) _____

* **Matrix Types:** Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify)

** **Preservative Types:** (1) HNO3, (2) H2SO4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved

Client Sample ID	Matrix*	Grab	Composite	Filtered	Date Collected	Time Collected	No. of Containers	Requested Analyses → Preservative Types **	Ammonia								For Lab Use 16H1697
16-1	GW	X			8/23/16	0902	1	H2SO4	X								-01
16-2	GW	X			8/23/16	0950	1		X								-02
16-3	GW	X			8/23/16	1226	1		X								-03
16-4	GW	X			8/23/16	1335	1		X								-04
16-1D	GW	X			8/23/16	0902	1		X								-05
16-2D	GW	X			8/23/16	0950	1		X								-06
16-3D	GW	X			8/23/16	1226	1		X								-07
16-4D	GW	X			8/23/16	1335	1		X								-08

Possible Hazard Identification [] Hazardous [] Non-Hazardous [] Radioactive **Sample Disposition** [X] Dispose as appropriate [] Return [] Archive

Comments

To be completed by Microbac	Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
Temperature Upon Receipt (°C) 4.5-1.0=3.5	Patty L Kostro	8/23/16 3:17 pm		8/23/16 3:17pm
Samples Received on Ice? Yes No N/A		8/24/16 8:00 AM		8/24/16 08:00
Custody Seals Intact? Yes No N/A	Ron Duncan	8/24/16 9:35	Noah Ramos	8-24-16 0935

Page ___ of ___

rev.6/18/15

Carey Gadzala
16H1697
ArcelorMittal - Burns Harbor, IN
Dock Wall Inspection
08/24/2016

MICROBAC®

September 8, 2016

Arcelor Mittal USA, Inc.
250 W US Highway 12
Burns Harbor, IN 46304-9745

Work Order No.: 16H2149

Re: Dock Wall Inspection

Dear Teri Kirk:

Microbac Laboratories, Inc. - Chicagoland Division received 20 sample(s) on 8/31/2016 9:40:00AM for the analyses presented in the following report as Work Order 16H2149.

The enclosed results were obtained from and are applicable to the sample(s) as received at the laboratory. All sample results are reported on an "as received" basis unless otherwise noted.

All data included in this report have been reviewed and meet the applicable project specific and certification specific requirements, unless otherwise noted. A qualifications page is included in this report and lists the programs under which Microbac maintains certification.

This report has been paginated in its entirety and shall not be reproduced except in full, without the written approval of Microbac Laboratories.

We appreciate the opportunity to service your analytical needs. If you have any questions, please contact your project manager. For any feedback, please contact Robert Crookston, Managing Director, at robert.crookston@microbac.com.

Sincerely,
Microbac Laboratories, Inc.

Carey Gadzala
Project Manager

MICROBAC®

WORK ORDER SAMPLE SUMMARY

Date: *Thursday, September 8, 2016*

Client: Arcelor Mittal USA, Inc.
Project: Dock Wall Inspection
Lab Order: 16H2149

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
16H2149-01	16-6		08/30/2016 10:05	8/31/2016 9:40:00AM
16H2149-02	16-6D		08/30/2016 10:20	8/31/2016 9:40:00AM
16H2149-03	16-7		08/30/2016 10:35	8/31/2016 9:40:00AM
16H2149-04	16-7D		08/30/2016 10:42	8/31/2016 9:40:00AM
16H2149-05	16-8		08/30/2016 10:55	8/31/2016 9:40:00AM
16H2149-06	16-8D		08/30/2016 11:00	8/31/2016 9:40:00AM
16H2149-07	16-9		08/30/2016 11:20	8/31/2016 9:40:00AM
16H2149-08	16-9D		08/30/2016 11:27	8/31/2016 9:40:00AM
16H2149-09	16-10		08/30/2016 11:47	8/31/2016 9:40:00AM
16H2149-10	16-10D		08/30/2016 11:55	8/31/2016 9:40:00AM
16H2149-11	16-11		08/30/2016 12:06	8/31/2016 9:40:00AM
16H2149-12	16-11D		08/30/2016 12:08	8/31/2016 9:40:00AM
16H2149-13	16-12		08/30/2016 12:22	8/31/2016 9:40:00AM
16H2149-14	16-12D		08/30/2016 12:24	8/31/2016 9:40:00AM
16H2149-15	16-13		08/30/2016 12:30	8/31/2016 9:40:00AM
16H2149-16	16-13D		08/30/2016 12:32	8/31/2016 9:40:00AM
16H2149-17	16-14		08/30/2016 12:42	8/31/2016 9:40:00AM
16H2149-18	16-14D		08/30/2016 12:50	8/31/2016 9:40:00AM
16H2149-19	16-15		08/30/2016 13:05	8/31/2016 9:40:00AM
16H2149-20	16-15D		08/30/2016 13:12	8/31/2016 9:40:00AM

MICROBAC®

Analytical Results

Date: *Thursday, September 8, 2016*

Client: Arcelor Mittal USA, Inc.
Client Project: Dock Wall Inspection
Client Sample ID: 16-6
Sample Description:
Matrix: Aqueous

Work Order/ID: 16H2149-01
Sampled: 08/30/2016 10:05
Received: 08/31/2016 9:40

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: **EPA 350.1 Rev 2.0**						Analyst: **GRIEFF**
Nitrogen, Ammonia as N									Prep Date/Time: **09/05/2016 09:05**
Nitrogen, Ammonia (As N)	ei	A	**2.9**	0.054	0.10		mg/L	1	09/06/2016 11:41

MICROBAC®

Analytical Results

Date: *Thursday, September 8, 2016*

Client: Arcelor Mittal USA, Inc.
Client Project: Dock Wall Inspection
Client Sample ID: 16-6D
Sample Description:
Matrix: Aqueous

Work Order/ID: 16H2149-02
Sampled: 08/30/2016 10:20
Received: 08/31/2016 9:40

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: **EPA 350.1 Rev 2.0**						Analyst: **GRIEFF**
Nitrogen, Ammonia as N									Prep Date/Time: **09/05/2016 09:05**
Nitrogen, Ammonia (As N)	ei	A	2.7	0.054	0.10		mg/L	1	09/06/2016 11:47

MICROBAC®

Analytical Results

Date: *Thursday, September 8, 2016*

Client: Arcelor Mittal USA, Inc.
Client Project: Dock Wall Inspection
Client Sample ID: 16-7
Sample Description:
Matrix: Aqueous

Work Order/ID: 16H2149-03
Sampled: 08/30/2016 10:35
Received: 08/31/2016 9:40

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: **EPA 350.1 Rev 2.0**						Analyst: **GRIEFF**
Nitrogen, Ammonia as N									Prep Date/Time: **09/05/2016 09:05**
Nitrogen, Ammonia (As N)	ei	A	*2.3*	0.054	0.10		mg/L	1	09/06/2016 11:49

MICROBAC®

Analytical Results

Date: *Thursday, September 8, 2016*

Client: Arcelor Mittal USA, Inc.
Client Project: Dock Wall Inspection
Client Sample ID: 16-7D
Sample Description:
Matrix: Aqueous

Work Order/ID: 16H2149-04
Sampled: 08/30/2016 10:42
Received: 08/31/2016 9:40

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: **EPA 350.1 Rev 2.0**						Analyst: **GRIEFF**
Nitrogen, Ammonia as N									Prep Date/Time: **09/06/2016 07:28**
Nitrogen, Ammonia (As N)	ei	A	*2.4*	0.054	0.10		mg/L	1	09/06/2016 11:51

MICROBAC®

Analytical Results

Date: *Thursday, September 8, 2016*

Client: Arcelor Mittal USA, Inc.
Client Project: Dock Wall Inspection
Client Sample ID: 16-8
Sample Description:
Matrix: Aqueous

Work Order/ID: 16H2149-05
Sampled: 08/30/2016 10:55
Received: 08/31/2016 9:40

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: **EPA 350.1 Rev 2.0**						Analyst: **GRIEFF**
Nitrogen, Ammonia as N									Prep Date/Time: **09/06/2016 07:28**
Nitrogen, Ammonia (As N)	ei	A	*2.8*	0.054	0.10		mg/L	1	09/06/2016 11:52

MICROBAC®

Analytical Results

Date: *Thursday, September 8, 2016*

Client: Arcelor Mittal USA, Inc.
Client Project: Dock Wall Inspection
Client Sample ID: 16-8D
Sample Description:
Matrix: Aqueous

Work Order/ID: 16H2149-06
Sampled: 08/30/2016 11:00
Received: 08/31/2016 9:40

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: **EPA 350.1 Rev 2.0**						Analyst: **GRIEFF**
Nitrogen, Ammonia as N									Prep Date/Time: **09/06/2016 07:28**
Nitrogen, Ammonia (As N)	ei	A	2.7	0.054	0.10		mg/L	1	09/06/2016 11:58

MICROBAC®

Analytical Results

Date: *Thursday, September 8, 2016*

Client: Arcelor Mittal USA, Inc.
Client Project: Dock Wall Inspection
Client Sample ID: 16-9
Sample Description:
Matrix: Aqueous

Work Order/ID: 16H2149-07
Sampled: 08/30/2016 11:20
Received: 08/31/2016 9:40

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: **EPA 350.1 Rev 2.0**						Analyst: **GRIEFF**
Nitrogen, Ammonia as N									Prep Date/Time: **09/06/2016 07:28**
Nitrogen, Ammonia (As N)	ei	A	2.2	0.054	0.10		mg/L	1	09/06/2016 12:04

MICROBAC®

Analytical Results

Date: *Thursday, September 8, 2016*

Client: Arcelor Mittal USA, Inc.
Client Project: Dock Wall Inspection
Client Sample ID: 16-9D
Sample Description:
Matrix: Aqueous

Work Order/ID: 16H2149-08
Sampled: 08/30/2016 11:27
Received: 08/31/2016 9:40

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: **EPA 350.1 Rev 2.0**						Analyst: **GRIEFF**
Nitrogen, Ammonia as N									Prep Date/Time: **09/06/2016 07:28**
Nitrogen, Ammonia (As N)	ei	A	*2.5*	0.054	0.10		mg/L	1	09/06/2016 12:06

MICROBAC®

Analytical Results

Date: *Thursday, September 8, 2016*

Client: Arcelor Mittal USA, Inc.
Client Project: Dock Wall Inspection
Client Sample ID: 16-10
Sample Description:
Matrix: Aqueous

Work Order/ID: 16H2149-09
Sampled: 08/30/2016 11:47
Received: 08/31/2016 9:40

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: **EPA 350.1 Rev 2.0**						Analyst: **GRIEFF**
Nitrogen, Ammonia as N									Prep Date/Time: **09/06/2016 07:28**
Nitrogen, Ammonia (As N)	ei	A	*2.1*	0.054	0.10		mg/L	1	09/06/2016 12:08

MICROBAC®

Analytical Results

Date: *Thursday, September 8, 2016*

Client: Arcelor Mittal USA, Inc.
Client Project: Dock Wall Inspection
Client Sample ID: 16-10D
Sample Description:
Matrix: Aqueous

Work Order/ID: 16H2149-10
Sampled: 08/30/2016 11:55
Received: 08/31/2016 9:40

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: EPA 350.1 Rev 2.0						Analyst: GRIEFF
Nitrogen, Ammonia as N									Prep Date/Time: 09/06/2016 07:28
Nitrogen, Ammonia (As N)	ei	A	2.2	0.054	0.10		mg/L	1	09/06/2016 12:10

MICROBAC®

Analytical Results

Date: *Thursday, September 8, 2016*

Client: Arcelor Mittal USA, Inc.
Client Project: Dock Wall Inspection
Client Sample ID: 16-11
Sample Description:
Matrix: Aqueous

Work Order/ID: 16H2149-11
Sampled: 08/30/2016 12:06
Received: 08/31/2016 9:40

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: **EPA 350.1 Rev 2.0**						Analyst: **GRIEFF**
Nitrogen, Ammonia as N									Prep Date/Time: **09/06/2016 07:28**
Nitrogen, Ammonia (As N)	ei	A	*0.94*	0.054	0.10		mg/L	1	09/06/2016 12:12

MICROBAC®

Analytical Results

Date: *Thursday, September 8, 2016*

Client: Arcelor Mittal USA, Inc.
Client Project: Dock Wall Inspection
Client Sample ID: 16-11D
Sample Description:
Matrix: Aqueous

Work Order/ID: 16H2149-12
Sampled: 08/30/2016 12:08
Received: 08/31/2016 9:40

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: EPA 350.1 Rev 2.0						Analyst: GRIEFF
Nitrogen, Ammonia as N									Prep Date/Time: 09/06/2016 07:28
Nitrogen, Ammonia (As N)	ei	A	*1.0*	0.054	0.10		mg/L	1	09/06/2016 12:14

MICROBAC®

Analytical Results

Date: *Thursday, September 8, 2016*

Client: Arcelor Mittal USA, Inc.
Client Project: Dock Wall Inspection
Client Sample ID: 16-12
Sample Description:
Matrix: Aqueous

Work Order/ID: 16H2149-13
Sampled: 08/30/2016 12:22
Received: 08/31/2016 9:40

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: EPA 350.1 Rev 2.0						Analyst: GNIEFF
Nitrogen, Ammonia as N									Prep Date/Time: 09/06/2016 07:28
Nitrogen, Ammonia (As N)	ei	A	*0.91*	0.054	0.10		mg/L	1	09/06/2016 12:16

MICROBAC®

Analytical Results

Date: *Thursday, September 8, 2016*

Client: Arcelor Mittal USA, Inc.
Client Project: Dock Wall Inspection
Client Sample ID: 16-12D
Sample Description:
Matrix: Aqueous

Work Order/ID: 16H2149-14
Sampled: 08/30/2016 12:24
Received: 08/31/2016 9:40

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
Method: EPA 350.1 Rev 2.0									Analyst: ORIEFF
Nitrogen, Ammonia as N									Prep Date/Time: 09/06/2016 07:28
Nitrogen, Ammonia (As N)	ei	A	*1.1*	0.054	0.10		mg/L	1	09/06/2016 12:18

MICROBAC®

Analytical Results

Date: *Thursday, September 8, 2016*

Client: Arcelor Mittal USA, Inc.
Client Project: Dock Wall Inspection
Client Sample ID: 16-13
Sample Description:
Matrix: Aqueous

Work Order/ID: 16H2149-15
Sampled: 08/30/2016 12:30
Received: 08/31/2016 9:40

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: EPA 350.1 Rev 2.0						Analyst: GRIFFF
Nitrogen, Ammonia as N									Prep Date/Time: 09/06/2016 07:28
Nitrogen, Ammonia (As N)	ei	A	*1.0*	0.054	0.10		mg/L	1	09/06/2016 12:20

MICROBAC®

Analytical Results

Date: *Thursday, September 8, 2016*

Client: Arcelor Mittal USA, Inc.
Client Project: Dock Wall Inspection
Client Sample ID: 16-13D
Sample Description:
Matrix: Aqueous

Work Order/ID: 16H2149-16
Sampled: 08/30/2016 12:32
Received: 08/31/2016 9:40

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: **EPA 350.1 Rev 2.0**						Analyst: **GRIEFF**
Nitrogen, Ammonia as N									Prep Date/Time: **09/06/2016 07:28**
Nitrogen, Ammonia (As N)	ei	A	*1.2*	0.054	0.10		mg/L	1	09/06/2016 12:22

MICROBAC®

Analytical Results

Date: *Thursday, September 8, 2016*

Client: Arcelor Mittal USA, Inc.
Client Project: Dock Wall Inspection
Client Sample ID: 16-14
Sample Description:
Matrix: Aqueous

Work Order/ID: 16H2149-17
Sampled: 08/30/2016 12:42
Received: 08/31/2016 9:40

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: **EPA 350.1 Rev 2.0**						Analyst: **GRIEFF**
Nitrogen, Ammonia as N									Prep Date/Time: **09/06/2016 07:28**
Nitrogen, Ammonia (As N)	ei	A	*1.3*	0.054	0.10		mg/L	1	09/06/2016 12:28

MICROBAC®

Analytical Results

Date: *Thursday, September 8, 2016*

Client: Arcelor Mittal USA, Inc.
Client Project: Dock Wall Inspection
Client Sample ID: 16-14D
Sample Description:
Matrix: Aqueous

Work Order/ID: 16H2149-18
Sampled: 08/30/2016 12:50
Received: 08/31/2016 9:40

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: **EPA 350.1 Rev 2.0**						Analyst: **GRIFFF**
Nitrogen, Ammonia as N									Prep Date/Time: **09/06/2016 11:35**
Nitrogen, Ammonia (As N)	ei	A	***0.90***	0.054	0.10		mg/L	1	09/06/2016 13:01

MICROBAC®

Analytical Results

Date: *Thursday, September 8, 2016*

Client: Arcelor Mittal USA, Inc.
Client Project: Dock Wall Inspection
Client Sample ID: 16-15
Sample Description:
Matrix: Aqueous

Work Order/ID: 16H2149-19
Sampled: 08/30/2016 13:05
Received: 08/31/2016 9:40

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: **EPA 350.1 Rev 2.0**						Analyst: **GRIEFF**
Nitrogen, Ammonia as N									Prep Date/Time: **09/07/2016 07:55**
Nitrogen, Ammonia (As N)	ei	A	***0.41***	0.054	0.10		mg/L	1	09/08/2016 11:26

MICROBAC®

Analytical Results

Date: *Thursday, September 8, 2016*

Client: Arcelor Mittal USA, Inc.
Client Project: Dock Wall Inspection
Client Sample ID: 16-15D
Sample Description:
Matrix: Aqueous

Work Order/ID: 16H2149-20
Sampled: 08/30/2016 13:12
Received: 08/31/2016 9:40

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: **EPA 350.1 Rev 2.0**						Analyst: **GRIEFF**
Nitrogen, Ammonia as N									Prep Date/Time: **09/07/2016 07:55**
Nitrogen, Ammonia (As N)	ei	A	***0.40***	0.054	0.10		mg/L	1	09/08/2016 11:31

FLAGS, FOOTNOTES AND ABBREVIATIONS (as needed)

B = Detected in the associated method Blank at a concentration above the routine RL
b- = Detected in the associated method Blank at a concentration greater than 2.2 times the MDL
b* = Detected in the associated method Blank at a concentration greater than half the RL
CFU = Colony forming units
D = Dilution performed on sample
DF = Dilution Factor
g = Gram
E = Value above quantitation range
H = Analyte was prepared and/or analyzed outside of the analytical method holding time
I = Matrix Interference
J = Analyte concentration detected between RL and MDL (Metals / Organics)
LOD = Limit of Detection
LOQ = Limit of Quantitation
m3 = Meters cubed
MDL = Method Detection Limit
mg/Kg = Milligrams per Kilogram (ppm)
mg/L = Milligrams per Liter (ppm)
NA = Not Analyzed
ND = Not Detected at the Reporting Limit (or the Method Detection Limit, if used)
NR = Not Recovered
R = RPD outside accepted recovery limits
RL = Reporting Limit
S = Spike recovery outside recovery limits
Surr = Surrogate
U = Undetected
> = Greater than
< = Less than
% = Percent
* = Result exceeds project specific limits

ANALYTE TYPES: (AT)

A,B = Target Analyte
I = Internal Standard
M = Summation Analyte
S = Surrogate
T = Tentatively Identified Compound (TIC, concentration estimated)

QC SAMPLE IDENTIFICATIONS

BLK = Method Blank
DUP = Method Duplicate
BS = Method Blank Spike
MS = Matrix Spike
ICB = Initial Calibration Blank
CCB = Continuing Calibration Blank
CRL = Client Required Reporting Limit
PDS = Post Digestion Spike
QCS = Quality Control Standard
ICSA = Interference Check Standard "A"
ICSAB = Interference Check Standard "AB"
BSD = Method Blank Spike Duplicate
MSD = Matrix Spike Duplicate
ICV = Initial Calibration Verification
CCV = Continuing Calibration Verification
OPR = Ongoing Precision and Recovery Standard
SD = Serial Dilution

CERTIFICATIONS (Certs)

Below is a list of certifications maintained by the Microbac Merrillville Laboratory. All data included in this report has been reviewed for and meets all project specific and quality control requirements of the applicable accreditation, unless otherwise noted. Complete lists of individual analytes pursuant to each certification below are available upon request.

[d] Illinois EPA drinking water, wastewater and solid waste analysis (#200064)

[i] Kansas Dept Health & Env. NELAP (#E-10397)

MICROBAC®

COOLER INSPECTION

Date: Thursday, September 8, 2016

Client Name: Arcelor Mittal USA, Inc.

Date/Time Received: 08/31/2016 09:40

Work Order Number: 16H2149

Received by: Nicole Rainwater

Checklist completed by: 8/31/2016 10:55:00AM | Dave Bryant

Reviewed by: 8/31/2016 | CAG

Carrier Name: Microbac

Cooler ID: Default Cooler

Container/Temp Blank Temperature: 0.5° C

After-Hour Arrival?	Yes	☐	No	☑		
Shipping container/cooler in good condition?	Yes	☑	No	☐	Not Present	☐
Custody seals intact on shipping container/cooler?	Yes	☐	No	☐	Not Present	☑
Custody seals intact on sample containers?	Yes	☐	No	☐	Not Present	☑
COC present?	Yes	☑	No	☐		
COC included sufficient client identification?	Yes	☑	No	☐		
COC included sufficient sample collector information?	Yes	☑	No	☐		
COC included a sample description?	Yes	☑	No	☐		
COC agrees with sample labels?	Yes	☑	No	☐		
COC identified the appropriate matrix?	Yes	☑	No	☐		
COC included date of collection?	Yes	☑	No	☐		
COC included time of collection?	Yes	☑	No	☐		
COC identified the appropriate number of containers?	Yes	☑	No	☐		
Samples in proper container/bottle?	Yes	☑	No	☐		
Sample containers intact?	Yes	☑	No	☐		
Sufficient sample volume for indicated test?	Yes	☑	No	☐		
All samples received within holding time?	Yes	☑	No	☐		
If the samples are preserved, are the preservatives identified?	Yes	☑	No	☐		

If No, adjusted by? _____

COC included the requested analyses?	Yes	☑	No	☐		
COC signed when relinquished and received?	Yes	☑	No	☐		
Samples received on ice?	Yes	☑	No	☐		
Samples properly preserved?	Yes	☑	No	☐		
Voa vials for aqueous samples have zero headspace?	Yes	☐	No	☐	No VOA vials submitted	☑

Cooler Comments:

ANY "NO" EVALUATION (excluding After-Hour Receipt) REQUIRES CLIENT NOTIFICATION.

Sample ID	Client Sample ID	Comments
16H2149-01	16-6	
16H2149-02	16-6D	
16H2149-03	16-7	
16H2149-04	16-7D	
16H2149-05	16-8	
16H2149-06	16-8D	
16H2149-07	16-9	
16H2149-08	16-9D	
16H2149-09	16-10	
16H2149-10	16-10D	
16H2149-11	16-11	
16H2149-12	16-11D	
16H2149-13	16-12	
16H2149-14	16-12D	
16H2149-15	16-13	
16H2149-16	16-13D	
16H2149-17	16-14	
16H2149-18	16-14D	
16H2149-19	16-15	
16H2149-20	16-15D	

16H2149 Carey Gadzala
ArcelorMittal - Burns Harbor, IN
Dock Wall Inspection
8/31/2016

MICROBAC®

Samples Submitted to:
[X] 250 West 84th Drive, Merrillville, IN 46410, Tel: 219-769-8378, Fax: 219-769-1664
[ ] 5713 West 85th Street, Indianapolis, IN 46278, Tel: 317-872-1375, Fax: 317-872-1379

Chain of Custody Record

Number **136081**

Instructions on back

e ArcelorMittal Burns Harbor	Project Dock Wall Inspection	Turnaround Time	Report Type
	Location	[X] Routine (5 to 7 business days)	[X] Results Only [ ] Level II
Zip	PO #	[ ] RUSH* (notify lab)	[ ] Level III [ ] Level III CLP-like
	Compliance Monitoring? [ ] Yes [ ] No	(needed by)	[ ] Level IV [ ] Level IV CLP-like
#	(1)Agency/Program		[ ] EDD

(PRINT) David Ekkens Sampler Signature David Ekkens Sampler Phone # 219 808 9099

t via [ ] Mail [ ] Telephone [ ] Fax (fax #) _____ [X] e-mail (address) _____

* **Matrix Types:** Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify)

Preservative Types: (1) HNO3, (2) H2SO4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved

Client Sample ID	Matrix*	Grab	Composite	Filtered	Date Collected	Time Collected	No. of Containers	Requested Analyses → Preservative Types **	NH3	For Lab Use Only
16-6	SW	X			8-30-16	10:05A	1	H2SO4		16H2149 -01
16-6D						10:20A	1			-02
16-7						10:35A	1			-03
16-7D						10:42A	1			-04
16-8						10:55A	1			-05
16-8D						11:06A	1			-06
16-9						11:20A	1			-07
16-9D						11:27A	1			-08
16-10						11:47A	1			-09
16-10D						11:55A	1			-10

Possible Hazard Identification [ ] Hazardous [ ] Non-Hazardous [ ] Radioactive

Sample Disposition [ ] Dispose as appropriate [ ] Return [ ] Archive

Comments

To be completed by Microbac

Temperature Upon Receipt (°C)	Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
1.0-0.5=0.5	[signature]	8-30-16 2:15p	[signature]	8/30/16 2:15pm
Samples Received on Ice? Yes No N/A	Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
	[signature]	8/31/16 8:00 AM	[signature]	8/31/16 0800
Custody Seals Intact? Yes No N/A	Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
	[signature]	8/31/16 0940	[signature]	8/31/16 0940

rev.6/18/15

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Samples Submitted to:

[X] 250 West 84th Drive, Merrillville, IN 46410, Tel: 219-769-8378, Fax: 219-769-1664

[ ] 5713 West 85th Street, Indianapolis, IN 46278, Tel: 317-872-1375, Fax: 317-872-1379

Chain of Custody Record

Number 136079

Instructions on back

Client Name: ArcelorMittal Burns Harbor	Project: Dock Wall Inspection	Turnaround Time	Report Type
Address:	Location:	[X] Routine (5 to 7 business days)	[X] Results Only [ ] Level II
City, State, Zip:	PO #:	[ ] RUSH* (notify lab)	[ ] Level III [ ] Level III CLP-like
Contact:	Compliance Monitoring? [ ] Yes [ ] No	(needed by)	[ ] Level IV [ ] Level IV CLP-like
Telephone #:	(1)Agency/Program		[ ] EDD

Sampled by (PRINT): David Eckert Sampler Signature: David Eckert Sampler Phone #: 219 808 9079

Send Report via [ ] Mail [ ] Telephone [ ] Fax (fax #) [X] e-mail (address)

* Matrix Types: Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify)

** Preservative Types: (1) HNO3, (2) H2SO4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved

Client Sample ID	Matrix*	Grab	Composite	Filtered	Date Collected	Time Collected	No. of Containers	Requested Analyses → Preservative Types **	NH3	For Lab Use Only
										16H2149
16-11	SW	X			8-30-16	12:06P	1	H2SO4		-11
16-11D						12:08P	1			-12
16-12						12:22P	1			-13
16-12D						12:24P	1			-14
16-13						12:30P	1			-15
16-13D						12:32P	1			-16
16-14					12:42	~~12:42~~ D	1			-17
16-14D					12:50	12:50P	1			-18
16-15						1:05P	1			-19
16-15D						1:12	1	↓		-20

Possible Hazard Identification [ ] Hazardous [ ] Non-Hazardous [ ] Radioactive

Sample Disposition [ ] Dispose as appropriate [ ] Return [ ] Archive

Comments

To be completed by Microbac

Temperature Upon Receipt (°C): 1.0-0.5=0.5

Samples Received on Ice? Yes / No / N/A

Custody Seals Intact? Yes / No / (N/A)

Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
	8-30-16 2:15P		8/30/16 2:15pm
	8/31/16 8:00AM		8/31/16 0800
	8/31/16 0940		8/31/16 0940

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MICROBAC®

September 14, 2016

Arcelor Mittal USA, Inc.
250 W US Highway 12
Burns Harbor, IN 46304-9745

Work Order No.: 16I0272

Re: Dock Wall Inspection

Dear Teri Kirk:

Microbac Laboratories, Inc. - Chicagoland Division received 22 sample(s) on 9/7/2016 9:33:00AM for the analyses presented in the following report as Work Order 16I0272.

The enclosed results were obtained from and are applicable to the sample(s) as received at the laboratory. All sample results are reported on an "as received" basis unless otherwise noted.

All data included in this report have been reviewed and meet the applicable project specific and certification specific requirements, unless otherwise noted. A qualifications page is included in this report and lists the programs under which Microbac maintains certification.

This report has been paginated in its entirety and shall not be reproduced except in full, without the written approval of Microbac Laboratories.

We appreciate the opportunity to service your analytical needs. If you have any questions, please contact your project manager. For any feedback, please contact Robert Crookston, Managing Director, at robert.crookston@microbac.com.

Sincerely,
Microbac Laboratories, Inc.

Carey Gadzala

Carey Gadzala
Project Manager

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WORK ORDER SAMPLE SUMMARY

Date: *Wednesday, September 14, 2016*

Client: Arcelor Mittal USA, Inc.
Project: Dock Wall Inspection
Lab Order: 16I0272

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
16I0272-01	16-16		09/06/2016 09:59	9/7/2016 9:33:00AM
16I0272-02	16-16D		09/06/2016 09:59	9/7/2016 9:33:00AM
16I0272-03	16-17		09/06/2016 10:33	9/7/2016 9:33:00AM
16I0272-04	16-17D		09/06/2016 10:33	9/7/2016 9:33:00AM
16I0272-05	16-18		09/06/2016 10:50	9/7/2016 9:33:00AM
16I0272-06	16-18D		09/06/2016 10:50	9/7/2016 9:33:00AM
16I0272-07	16-19		09/06/2016 11:08	9/7/2016 9:33:00AM
16I0272-08	16-19D		09/06/2016 11:08	9/7/2016 9:33:00AM
16I0272-09	16-20		09/06/2016 11:20	9/7/2016 9:33:00AM
16I0272-10	16-20D		09/06/2016 11:20	9/7/2016 9:33:00AM
16I0272-11	16-21		09/06/2016 11:37	9/7/2016 9:33:00AM
16I0272-12	16-21D		09/06/2016 11:37	9/7/2016 9:33:00AM
16I0272-13	16-22		09/06/2016 12:02	9/7/2016 9:33:00AM
16I0272-14	16-22D		09/06/2016 12:02	9/7/2016 9:33:00AM
16I0272-15	16-23		09/06/2016 13:04	9/7/2016 9:33:00AM
16I0272-16	16-23D		09/06/2016 13:04	9/7/2016 9:33:00AM
16I0272-17	16-24		09/06/2016 13:20	9/7/2016 9:33:00AM
16I0272-18	16-24D		09/06/2016 13:20	9/7/2016 9:33:00AM
16I0272-19	16-25		09/06/2016 13:54	9/7/2016 9:33:00AM
16I0272-20	16-25D		09/06/2016 13:54	9/7/2016 9:33:00AM
16I0272-21	16-26		09/06/2016 14:16	9/7/2016 9:33:00AM
16I0272-22	16-26D		09/06/2016 14:16	9/7/2016 9:33:00AM

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Analytical Results

Date: *Wednesday, September 14, 2016*

Client:	Arcelor Mittal USA, Inc.		
Client Project:	Dock Wall Inspection		
Client Sample ID:	16-16	**Work Order/ID:**	16I0272-01
Sample Description:		**Sampled:**	09/06/2016 9:59
Matrix:	Aqueous	**Received:**	09/07/2016 9:33

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: **EPA 350.1 Rev 2.0**						Analyst: **GRIEFF**
Nitrogen, Ammonia as N									Prep Date/Time: **09/10/2016 07:10**
Nitrogen, Ammonia (As N)	ei	A	*1.4*	0.054	0.10		mg/L	1	09/13/2016 14:51

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Analytical Results

Date: *Wednesday, September 14, 2016*

Client:	Arcelor Mittal USA, Inc.		
Client Project:	Dock Wall Inspection		
Client Sample ID:	16-16D	**Work Order/ID:**	16I0272-02
Sample Description:		**Sampled:**	09/06/2016 9:59
Matrix:	Aqueous	**Received:**	09/07/2016 9:33

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: **EPA 350.1 Rev 2.0**						Analyst: **GRIEFF**
Nitrogen, Ammonia as N									Prep Date/Time: **09/10/2016 07:10**
Nitrogen, Ammonia (As N)	ei	A	*1.7*	0.054	0.10		mg/L	1	09/13/2016 14:57

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Analytical Results

Date: *Wednesday, September 14, 2016*

Client: Arcelor Mittal USA, Inc.
Client Project: Dock Wall Inspection
Client Sample ID: 16-17
Sample Description:
Matrix: Aqueous

Work Order/ID: 16I0272-03
Sampled: 09/06/2016 10:33
Received: 09/07/2016 9:33

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: EPA 350.1 Rev 2.0						Analyst: GRIFF
Nitrogen, Ammonia as N									Prep Date/Time: 09/10/2016 07:10
Nitrogen, Ammonia (As N)	ei	A	*1.2*	0.054	0.10		mg/L	1	09/13/2016 14:59

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Analytical Results

Date: *Wednesday, September 14, 2016*

Client: Arcelor Mittal USA, Inc.
Client Project: Dock Wall Inspection
Client Sample ID: 16-17D
Sample Description:
Matrix: Aqueous

Work Order/ID: 16I0272-04
Sampled: 09/06/2016 10:33
Received: 09/07/2016 9:33

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: EPA 350.1 Rev 2.0						Analyst: GRIEFF
Nitrogen, Ammonia as N									Prep Date/Time: 09/10/2016 07:10
Nitrogen, Ammonia (As N)	ei	A	*1.2*	0.054	0.10		mg/L	1	09/13/2016 15:01

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Analytical Results

Date: *Wednesday, September 14, 2016*

Client:	Arcelor Mittal USA, Inc.		
Client Project:	Dock Wall Inspection		
Client Sample ID:	16-18	**Work Order/ID:**	16I0272-05
Sample Description:		**Sampled:**	09/06/2016 10:50
Matrix:	Aqueous	**Received:**	09/07/2016 9:33

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: **EPA 350.1 Rev 2.0**						Analyst: **GRIEFF**
Nitrogen, Ammonia as N									Prep Date/Time: **09/12/2016 08:35**
Nitrogen, Ammonia (As N)	ei	A	***0.24***	0.054	0.10		mg/L	1	09/12/2016 15:00

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Analytical Results

Date: *Wednesday, September 14, 2016*

Client: Arcelor Mittal USA, Inc.
Client Project: Dock Wall Inspection
Client Sample ID: 16-18D
Sample Description:
Matrix: Aqueous

Work Order/ID: 16I0272-06
Sampled: 09/06/2016 10:50
Received: 09/07/2016 9:33

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
Method: **EPA 350.1 Rev 2.0**									Analyst: GRIFF
Nitrogen, Ammonia as N									Prep Date/Time: **09/12/2016 08:35**
Nitrogen, Ammonia (As N)	ei	A	***0.25***	0.054	0.10		mg/L	1	09/12/2016 15:02

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Analytical Results

Date: *Wednesday, September 14, 2016*

Client:	Arcelor Mittal USA, Inc.		
Client Project:	Dock Wall Inspection		
Client Sample ID:	16-19	**Work Order/ID:**	16I0272-07
Sample Description:		**Sampled:**	09/06/2016 11:08
Matrix:	Aqueous	**Received:**	09/07/2016 9:33

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: **EPA 350.1 Rev 2.0**						Analyst: **GRIEFF**
Nitrogen, Ammonia as N									Prep Date/Time: **09/12/2016 08:35**
Nitrogen, Ammonia (As N)	ei	A	***0.58***	0.054	0.10		mg/L	1	09/13/2016 13:41

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Analytical Results

Date: *Wednesday, September 14, 2016*

Client: Arcelor Mittal USA, Inc.
Client Project: Dock Wall Inspection
Client Sample ID: 16-19D
Sample Description:
Matrix: Aqueous

Work Order/ID: 16I0272-08
Sampled: 09/06/2016 11:08
Received: 09/07/2016 9:33

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: **EPA 350.1 Rev 2.0**						Analyst: **GRIEFF**
Nitrogen, Ammonia as N									Prep Date/Time: **09/12/2016 08:35**
Nitrogen, Ammonia (As N)	ei	A	*0.60*	0.054	0.10		mg/L	1	09/13/2016 13:43

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Analytical Results

Date: *Wednesday, September 14, 2016*

Client: Arcelor Mittal USA, Inc.
Client Project: Dock Wall Inspection
Client Sample ID: 16-20
Sample Description:
Matrix: Aqueous

Work Order/ID: 16I0272-09
Sampled: 09/06/2016 11:20
Received: 09/07/2016 9:33

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: **EPA 350.1 Rev 2.0**						Analyst: **GRIEFF**
Nitrogen, Ammonia as N									Prep Date/Time: **09/12/2016 08:35**
Nitrogen, Ammonia (As N)	ei	A	***0.45***	0.054	0.10		mg/L	1	09/13/2016 13:45

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Analytical Results

Date: *Wednesday, September 14, 2016*

Client: Arcelor Mittal USA, Inc.
Client Project: Dock Wall Inspection
Client Sample ID: 16-20D
Sample Description:
Matrix: Aqueous

Work Order/ID: 16I0272-10
Sampled: 09/06/2016 11:20
Received: 09/07/2016 9:33

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: **EPA 350.1 Rev 2.0**						Analyst: **GRIEFF**
Nitrogen, Ammonia as N									Prep Date/Time: **09/12/2016 06:35**
Nitrogen, Ammonia (As N)	ei	A	***0.41***	0.054	0.10		mg/L	1	09/13/2016 13:47

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Analytical Results

Date: *Wednesday, September 14, 2016*

Client:	Arcelor Mittal USA, Inc.		
Client Project:	Dock Wall Inspection		
Client Sample ID:	16-21	**Work Order/ID:**	16I0272-11
Sample Description:		**Sampled:**	09/06/2016 11:37
Matrix:	Aqueous	**Received:**	09/07/2016 9:33

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: **EPA 350.1 Rev 2.0**						Analyst: **GRIEFF**
Nitrogen, Ammonia as N									Prep Date/Time: **09/12/2016 08:35**
Nitrogen, Ammonia (As N)	ei	A	***0.53***	0.054	0.10		mg/L	1	09/13/2016 13:49

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Analytical Results

Date: *Wednesday, September 14, 2016*

Client:	Arcelor Mittal USA, Inc.		
Client Project:	Dock Wall Inspection		
Client Sample ID:	16-21D	**Work Order/ID:**	16I0272-12
Sample Description:		**Sampled:**	09/06/2016 11:37
Matrix:	Aqueous	**Received:**	09/07/2016 9:33

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: **EPA 350.1 Rev 2.0**						Analyst: **GRIEFF**
Nitrogen, Ammonia as N									Prep Date/Time: **09/12/2016 08:35**
Nitrogen, Ammonia (As N)	ei	A	*0.42*	0.054	0.10		mg/L	1	09/13/2016 13:51

MICROBAC®

Analytical Results

Date: *Wednesday, September 14, 2016*

Client: Arcelor Mittal USA, Inc.
Client Project: Dock Wall Inspection
Client Sample ID: 16-22
Sample Description:
Matrix: Aqueous

Work Order/ID: 16I0272-13
Sampled: 09/06/2016 12:02
Received: 09/07/2016 9:33

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: **EPA 350.1 Rev 2.0**						Analyst: **GRIEFF**
Nitrogen, Ammonia as N									Prep Date/Time: **09/12/2016 08:35**
Nitrogen, Ammonia (As N)	ei	A	***0.33***	0.054	0.10		mg/L	1	09/13/2016 13:53

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Analytical Results

Date: *Wednesday, September 14, 2016*

Client: Arcelor Mittal USA, Inc.
Client Project: Dock Wall Inspection
Client Sample ID: 16-22D
Sample Description:
Matrix: Aqueous

Work Order/ID: 16I0272-14
Sampled: 09/06/2016 12:02
Received: 09/07/2016 9:33

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: **EPA 350.1 Rev 2.0**						Analyst: **GRIEFF**
Nitrogen, Ammonia as N									Prep Date/Time: **09/12/2016 08:35**
Nitrogen, Ammonia (As N)	ei	A	***0.31***	0.054	0.10		mg/L	1	09/13/2016 13:55

MICROBAC®

Analytical Results

Date: *Wednesday, September 14, 2016*

Client:	Arcelor Mittal USA, Inc.		
Client Project:	Dock Wall Inspection		
Client Sample ID:	16-23	**Work Order/ID:**	16I0272-15
Sample Description:		**Sampled:**	09/06/2016 13:04
Matrix:	Aqueous	**Received:**	09/07/2016 9:33

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: **EPA 350.1 Rev 2.0**						Analyst: **GRIEFF**
Nitrogen, Ammonia as N									Prep Date/Time: **09/12/2016 08:35**
Nitrogen, Ammonia (As N)	ei	A	**2.7**	0.054	0.10		mg/L	1	09/13/2016 13:57

MICROBAC®

Analytical Results

Date: *Wednesday, September 14, 2016*

Client: Arcelor Mittal USA, Inc.
Client Project: Dock Wall Inspection
Client Sample ID: 16-23D
Sample Description:
Matrix: Aqueous

Work Order/ID: 16I0272-16
Sampled: 09/06/2016 13:04
Received: 09/07/2016 9:33

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: **EPA 350.1 Rev 2.0**						Analyst: **GRIEFF**
Nitrogen, Ammonia as N									Prep Date/Time: **09/12/2016 08:35**
Nitrogen, Ammonia (As N)	ei	A	***2.6***	0.054	0.10		mg/L	1	09/13/2016 14:06

MICROBAC®

Analytical Results

Date: *Wednesday, September 14, 2016*

Client: Arcelor Mittal USA, Inc.
Client Project: Dock Wall Inspection
Client Sample ID: 16-24
Sample Description:
Matrix: Aqueous

Work Order/ID: 16I0272-17
Sampled: 09/06/2016 13:20
Received: 09/07/2016 9:33

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: **EPA 350.1 Rev 2.0**						Analyst: **GRIEFF**
Nitrogen, Ammonia as N									Prep Date/Time: **09/12/2016 08:35**
Nitrogen, Ammonia (As N)	ei	A	*1.9*	0.054	0.10		mg/L	1	09/13/2016 14:08

MICROBAC®

Analytical Results

Date: *Wednesday, September 14, 2016*

Client: Arcelor Mittal USA, Inc.
Client Project: Dock Wall Inspection
Client Sample ID: 16-24D
Sample Description:
Matrix: Aqueous

Work Order/ID: 16I0272-18
Sampled: 09/06/2016 13:20
Received: 09/07/2016 9:33

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: **EPA 350.1 Rev 2.0**						Analyst: **GRIEFF**
Nitrogen, Ammonia as N									Prep Date/Time: **09/12/2016 11:25**
Nitrogen, Ammonia (As N)	ei	A	*1.5*	0.054	0.10		mg/L	1	09/13/2016 14:10

MICROBAC®

Analytical Results

Date: *Wednesday, September 14, 2016*

Client: Arcelor Mittal USA, Inc.
Client Project: Dock Wall Inspection
Client Sample ID: 16-25
Sample Description:
Matrix: Aqueous

Work Order/ID: 16I0272-19
Sampled: 09/06/2016 13:54
Received: 09/07/2016 9:33

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: **EPA 350.1 Rev 2.0**						Analyst: **GRIEFF**
Nitrogen, Ammonia as N									Prep Date/Time: **09/13/2016 08:00**
Nitrogen, Ammonia (As N)	ei	A	4.7	0.054	0.10		mg/L	1	09/13/2016 12:59

Analytical Results

Date: *Wednesday, September 14, 2016*

Client:	Arcelor Mittal USA, Inc.		
Client Project:	Dock Wall Inspection		
Client Sample ID:	16-25D	**Work Order/ID:**	16I0272-20
Sample Description:		**Sampled:**	09/06/2016 13:54
Matrix:	Aqueous	**Received:**	09/07/2016 9:33

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: **EPA 350.1 Rev 2.0**						Analyst: **GRIEFF**
Nitrogen, Ammonia as N									Prep Date/Time: **09/13/2016 08:00**
Nitrogen, Ammonia (As N)	ei	A	***5.0***	0.054	0.10		mg/L	1	09/13/2016 13:01

Analytical Results

Date: *Wednesday, September 14, 2016*

Client: Arcelor Mittal USA, Inc.
Client Project: Dock Wall Inspection
Client Sample ID: 16-26
Sample Description:
Matrix: Aqueous

Work Order/ID: 16I0272-21
Sampled: 09/06/2016 14:16
Received: 09/07/2016 9:33

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: **EPA 350.1 Rev 2.0**						Analyst: **GRIEFF**
Nitrogen, Ammonia as N									Prep Date/Time: **09/13/2016 08:00**
Nitrogen, Ammonia (As N)	ei	A	***4.3***	0.054	0.10		mg/L	1	09/13/2016 13:03

MICROBAC®

Analytical Results

Date: *Wednesday, September 14, 2016*

Client: Arcelor Mittal USA, Inc.
Client Project: Dock Wall Inspection
Client Sample ID: 16-26D
Sample Description:
Matrix: Aqueous

Work Order/ID: 16I0272-22
Sampled: 09/06/2016 14:16
Received: 09/07/2016 9:33

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: **EPA 350.1 Rev 2.0**						Analyst: **GRIEFF**
Nitrogen, Ammonia as N									Prep Date/Time: **09/13/2016 08:00**
Nitrogen, Ammonia (As N)	ei	A	***4.8***	0.054	0.10		mg/L	1	09/13/2016 13:05

FLAGS, FOOTNOTES AND ABBREVIATIONS (as needed)

B = Detected in the associated method Blank at a concentration above the routine RL
b- = Detected in the associated method Blank at a concentration greater than 2.2 times the MDL
b* = Detected in the associated method Blank at a concentration greater than half the RL
CFU = Colony forming units
D = Dilution performed on sample
DF = Dilution Factor
g = Gram
E = Value above quantitation range
H = Analyte was prepared and/or analyzed outside of the analytical method holding time
I = Matrix Interference
J = Analyte concentration detected between RL and MDL (Metals / Organics)
LOD = Limit of Detection
LOQ = Limit of Quantitation
m3 = Meters cubed
MDL = Method Detection Limit
mg/Kg = Milligrams per Kilogram (ppm)
mg/L = Milligrams per Liter (ppm)
NA = Not Analyzed
ND = Not Detected at the Reporting Limit (or the Method Detection Limit, if used)
NR = Not Recovered
R = RPD outside accepted recovery limits
RL = Reporting Limit
S = Spike recovery outside recovery limits
Surr = Surrogate
U = Undetected
> = Greater than
< = Less than
% = Percent
* = Result exceeds project specific limits

ANALYTE TYPES: (AT)

A,B = Target Analyte
I = Internal Standard
M = Summation Analyte
S = Surrogate
T = Tentatively Identified Compound (TIC, concentration estimated)

QC SAMPLE IDENTIFICATIONS

BLK = Method Blank
DUP = Method Duplicate
BS = Method Blank Spike
MS = Matrix Spike
ICB = Initial Calibration Blank
CCB = Continuing Calibration Blank
CRL = Client Required Reporting Limit
PDS = Post Digestion Spike
QCS = Quality Control Standard
ICSA = Interference Check Standard "A"
ICSAB = Interference Check Standard "AB"
BSD = Method Blank Spike Duplicate
MSD = Matrix Spike Duplicate
ICV = Initial Calibration Verification
CCV = Continuing Calibration Verification
OPR = Ongoing Precision and Recovery Standard
SD = Serial Dilution

CERTIFICATIONS (Certs)

Below is a list of certifications maintained by the Microbac Merrillville Laboratory. All data included in this report has been reviewed for and meets all project specific and quality control requirements of the applicable accreditation, unless otherwise noted. Complete lists of individual analytes pursuant to each certification below are available upon request.

[d] Illinois EPA drinking water, wastewater and solid waste analysis (#200064)

[i] Kansas Dept Health & Env. NELAP (#E-10397)

MICROBAC®

COOLER INSPECTION

Date: Wednesday, September 14, 2016

Client Name: Arcelor Mittal USA, Inc.

Date/Time Received: 09/07/2016 09:33

Work Order Number: 16I0272

Received by: Nicole Rainwater

Checklist completed by: 9/7/2016 10:38:00AM | Nicole Rainwater

Reviewed by: 9/7/2016 | CAG

Carrier Name: Microbac

Cooler ID: Default Cooler

Container/Temp Blank Temperature: 2.2° C

After-Hour Arrival?	Yes	☐	No	☑		
Shipping container/cooler in good condition?	Yes	☑	No	☐	Not Present	☐
Custody seals intact on shipping container/cooler?	Yes	☐	No	☐	Not Present	☑
Custody seals intact on sample containers?	Yes	☐	No	☐	Not Present	☑
COC present?	Yes	☑	No	☐		
COC included sufficient client identification?	Yes	☑	No	☐		
COC included sufficient sample collector information?	Yes	☑	No	☐		
COC included a sample description?	Yes	☑	No	☐		
COC agrees with sample labels?	Yes	☑	No	☐		
COC identified the appropriate matrix?	Yes	☑	No	☐		
COC included date of collection?	Yes	☑	No	☐		
COC included time of collection?	Yes	☑	No	☐		
COC identified the appropriate number of containers?	Yes	☑	No	☐		
Samples in proper container/bottle?	Yes	☑	No	☐		
Sample containers intact?	Yes	☑	No	☐		
Sufficient sample volume for indicated test?	Yes	☑	No	☐		
All samples received within holding time?	Yes	☑	No	☐		
If the samples are preserved, are the preservatives identified?	Yes	☑	No	☐		

If No, adjusted by? _____

COC included the requested analyses?	Yes	☑	No	☐		
COC signed when relinquished and received?	Yes	☑	No	☐		
Samples received on ice?	Yes	☑	No	☐		
Samples properly preserved?	Yes	☑	No	☐		
Voa vials for aqueous samples have zero headspace?	Yes	☐	No	☐	No VOA vials submitted	☑

Cooler Comments:

ANY "NO" EVALUATION (excluding After-Hour Receipt) REQUIRES CLIENT NOTIFICATION.

Sample ID	Client Sample ID	Comments
16I0272-01	16-16	
16I0272-02	16-16D	
16I0272-03	16-17	
16I0272-04	16-17D	
16I0272-05	16-18	
16I0272-06	16-18D	
16I0272-07	16-19	
16I0272-08	16-19D	
16I0272-09	16-20	
16I0272-10	16-20D	
16I0272-11	16-21	
16I0272-12	16-21D	
16I0272-13	16-22	
16I0272-14	16-22D	
16I0272-15	16-23	
16I0272-16	16-23D	
16I0272-17	16-24	
16I0272-18	16-24D	
16I0272-19	16-25	
16I0272-20	16-25D	
16I0272-21	16-26	
16I0272-22	16-26D	

0272 Carey Gadzala
:elorMittal - Burns Harbor, IN
:k Wall Inspection
07/2016

MICROBAC®

Samples Submitted to: [] 250 West 84th Drive, Merrillville, IN 46410, Tel: 219-769-8378, Fax: 219-769-1664 [] 5713 West 85th Street, Indianapolis, IN 46278, Tel: 317-872-1375, Fax: 317-872-1379

Chain of Custody Record

Number 136082

Instructions on back

ne AMBH | Project Docwall Samples | Turnaround Time: [X] Routine (5 to 7 business days) [] RUSH* (notify lab) _____ (needed by) | Report Type: [X] Results Only [] Level II [] Level III [] Level III CLP-like [] Level IV [] Level IV CLP-like [] EDD

Zip | Location | PO #

| Compliance Monitoring? [] Yes [] No | (1)Agency/Program

y (PRINT) Patricia Kostru | Sampler Signature | Sampler Phone # 219 808 9099

rt via [] Mail [] Telephone [] Fax (fax #) _____ [X] e-mail (address) _____

* Matrix Types: Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify)

* Preservative Types: (1) HNO3, (2) H2SO4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved

Client Sample ID	Matrix*	Grab	Composite	Filtered	Date Collected	Time Collected	No. of Containers	Requested Analyses → Preservative Types **	Iron	NH3	For Lab Use Only
16-16	GW	✓			9/6	0959	1	H_2SO_4	✓		1610272 -01
16-16D	↓	✓			↓	0959	1	↓	✓		-02
16-17		✓				1033	1		✓		-03
16-17D		✓				1033	1		✓		-04
16-18		✓				1050	1		✓		-05
16-18D		✓				1050	1		✓		-06
16-19		✓				1108	1		✓		-07
16-19D		✓				1108	1		✓		-08
16-20	↓	✓			↓	1120	1	↓	✓		-09
16-20D	GW	✓			9/6	1120	1	H_2SO_4	✓		-10

Possible Hazard Identification [] Hazardous [] Non-Hazardous [] Radioactive

Sample Disposition [] Dispose as appropriate [] Return [] Archive

Comments

To be completed by Microbac

Temperature Upon Receipt (°C): 2.7-0.5=2.2

Samples Received on Ice? Yes No N/A

Custody Seals Intact? Yes No N/A

Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
	9/6/16, 1432 est		9/6/16 1432
	9/6/16, 1500	Ron Arnos	9/7/16 7:35
Ron Arnos	9/7/16 9:33	Nicole Reinert	9-7-16

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MICROBAC®

Samples Submitted to:
[] 250 West 84th Drive, Merrillville, IN 46410, Tel: 219-769-8378, Fax: 219-769-1664
[] 5713 West 85th Street, Indianapolis, IN 46278, Tel: 317-872-1375, Fax: 317-872-1379

Chain of Custody Record

Number 136084

Instructions on back

Client Name AMBH	Project Dock Wall Samples	Turnaround Time	Report Type
Address	Location	[x] Routine (5 to 7 business days)	[] Results Only [] Level II
City, State, Zip	PO #	[] RUSH* (notify lab)	[] Level III [] Level III CLP-like
Contact	Compliance Monitoring? [] Yes [] No	(needed by)	[] Level IV [] Level IV CLP-like
Telephone #	(1)Agency/Program		[] EDD

Sampled by (PRINT) Patricia Kostro Sampler Signature [signature] Sampler Phone # 219 808 9099

Send Report via [] Mail [] Telephone [] Fax (fax #) [x] e-mail (address)

* Matrix Types: Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify)

** Preservative Types: (1) HNO3, (2) H2SO4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved

Client Sample ID	Matrix*	Grab	Composite	Filtered	Date Collected	Time Collected	No. of Containers	Requested Analyses → Preservative Types **	NH_3								For Lab Use Only
																	1610272
16-21	GW	✓			9/6	1137		H_2SO_4	✓								-11
16-21 D	↓	✓			↓	1137		↓	✓								-12
16-22	↓	✓			↓	1202		↓	✓								-13
16-22D	↓	✓			↓	1202		↓	✓								-14
16-23	↓	✓			↓	1304		↓	✓								-15
16-23D	↓	✓			↓	1304		↓	✓								-16
16-24	↓	✓			↓	1320		↓	✓								-17
16-24D	↓	✓			↓	1320		↓	✓								-18
16-25	↓	✓			↓	1354		↓	✓								-19
16-25 D	GW	✓			9/6	1354		H_2SO_4	✓								-20

Possible Hazard Identification [] Hazardous [] Non-Hazardous [] Radioactive Sample Disposition [] Dispose as appropriate [] Return [] Archive

Comments

To be completed by Microbac

Temperature Upon Receipt (°C)	Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
2.7-0.5=2.2	[signature]	9/6/16, 1432 CST	[signature]	9/6/16 1432
Samples Received on Ice? (Yes) No N/A	Relinquished By (signature) [signature]	Date/Time 9/6/16, 1500	Received By (signature) [signature]	Date/Time 9/7/16 7135
Custody Seals Intact? Yes No (N/A)	Relinquished By (signature) [signature]	Date/Time 9/7/16 9:33	Received By (signature) [signature]	Date/Time 9-7-16

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MICROBAC®

Samples Submitted to:

[] 250 West 84th Drive, Merrillville, IN 46410, Tel: 219-769-8378, Fax: 219-769-1664

[] 5713 West 85th Street, Indianapolis, IN 46278, Tel: 317-872-1375, Fax: 317-872-1379

Chain of Custody Record

Number 136088

Instructions on back

Client Name: AMBH	Project: Dock Wall Samples	Turnaround Time: [✓] Routine (5 to 7 business days); [] RUSH* (notify lab) _____ (needed by)	Report Type: [✓] Results Only; [] Level II; [] Level III; [] Level III CLP-like; [] Level IV; [] Level IV CLP-like; [] EDD
Address:	Location:		
City, State, Zip:	PO #:		
Contact:	Compliance Monitoring? [] Yes [] No		
Telephone #:	(1)Agency/Program		

Sampled by (PRINT): Patricia Kestro Sampler Signature: Patricia Kestro Sampler Phone #: 2198089099

Send Report via: [] Mail [] Telephone [] Fax (fax #) _____ [X] email (address) _____

* Matrix Types: Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify)

** Preservative Types: (1) HNO3, (2) H2SO4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved

Client Sample ID	Matrix*	Grab	Composite	Filtered	Date Collected	Time Collected	No. of Containers	Requested Analyses → Preservative Types ** ↓	NH3								For Lab Use Only 161027
16-26	GW	✓			9/6	1416	1	H_2SO_4	✓								-21
16-26D	GW	✓			9/6	1416	1	H_2SO_4	✓								-22

Possible Hazard Identification: [] Hazardous [] Non-Hazardous [] Radioactive

Sample Disposition: [] Dispose as appropriate [] Return [] Archive

Comments:

To be completed by Microbac

Temperature Upon Receipt (°C): 2.7-0.5 = 2.2

Samples Received on Ice? Yes / No / N/A

Custody Seals Intact? Yes / No / N/A

Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
	9/6/16, 1432 EST		9/6/16 1432
	9/6/16, 15:00		9/7/16 7:35
	9/7/16 9:33		9-7-16

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